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EXECUTIVE OFFICE OF HUMAN SERVICES  
DEPARTMENT OF PUBLIC HEALTH

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ADOLESCENTS AT RISK

SEXUALLY TRANSMITTED DISEASES

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The extent of sexual activity among adolescents may not be clearly delineated, but it is certain that many adolescents participate in sexual activity which places them at risk of sexually transmitted diseases (STD) and infection with the human immunodeficiency virus (HIV), the agent which causes AIDS.

*In Massachusetts:*

Surveys suggest that more than half of adolescents engage in sexual intercourse during their high school years.

\*The average age of first intercourse is 16 years, but in urban areas the average age is younger.

All parameters of adolescent sexual activity are higher in urban areas.

Among sexually active teens, 32% report using condoms sometimes and 37% never use condoms.

Approximately 20% of sexually active teens have unprotected sex with multiple partners.

The first part of the paper discusses the importance of the study and the objectives of the research. It also outlines the methodology used in the study and the results obtained. The second part of the paper discusses the implications of the study and the conclusions drawn from the research. The third part of the paper discusses the limitations of the study and the areas for future research.

The study was conducted in a laboratory setting and the results were compared with those obtained from previous studies. The study found that the results were consistent with those obtained from previous studies. The study also found that the results were consistent with those obtained from previous studies. The study also found that the results were consistent with those obtained from previous studies.

Adolescence is a time of sexual experimentation. Sexual experimentation and social interaction are affected by school setting, drug experimentation, school dropout, runaway situations and changing lifestyles in colleges and the workplace. While only 1-2% of teens report homosexual relations, same-sex experimentation may take place in up to 40% of teen males. Each year large numbers of adolescents from all over the world arrive in Massachusetts to attend colleges and universities. They embark on new life experiences including sexual experiences.

*In Massachusetts:*

*Approximately 17% of inner city births are to teen mothers.*

*Births to teen mothers have increased over the past ten years.*

*One in ten teenage girls becomes pregnant each year.*

*Only one third of sexually active teens use contraception regularly.*



### Sexually Transmitted Diseases

Teenagers account for more than 25% of the annual reported STD's. This means that one of every seven teens contracts an STD each year. Rates of STD in 10 to 19-year-old clients of state STD clinics in urban areas have a 5 to 10-fold higher rate of STD morbidity than observed across the rest of the state. In every part of the state, the age groups 10-19 years and 20-24 years account for a disproportionate STD case load.

Rates of syphilis, antibiotic-resistant gonorrhea, chlamydia infection (which can lead to pelvic inflammatory disease and infertility), warts (some types of which may be associated with cancer) and herpes virus infection have all been increasing and adolescents are at special risk.

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In Massachusetts:

Reported STD in teens have doubled since 1985.

The rate of early syphilis in those 15-19 year old has increased by more than two-fold since 1986.

In the 15-19 year old group, the rate of gonorrhea increased by 10% between 1988 and 1989.

Ten percent of gonorrhea cases in Massachusetts are caused by bacteria which have become resistant to penicillin.

Teens residing in Boston have a gonorrhea infection rate of 904 per 100,000, while 20-24 year olds in Boston have a rate of 1393 per 100,000 (the statewide rate for all ages is 140 per 100,000).

Chlamydia infection has increased progressively in all age groups since reporting began in 1985, but increases in infection rate have been highest for those under 24 years old.

Chlamydia infection is reported in over 1000 per 100,000 teens and young adults in Boston, or 1% of 10 to 24 year olds.

Ethnic and cultural minorities are disproportionately affected by infection.

[SEE ATTACHED GRAPHICS]



### HIV Infection

Twenty percent of AIDS cases in Massachusetts have occurred in the 20 to 29-year age group. The average incubation period of eight years between acquisition of HIV and AIDS means that most of these AIDS victims acquired the disease in their late teens or early 20's. Adolescent AIDS, when compared to adult cases, is more likely to occur in females, minorities and with heterosexual contact. Persons who are positive for antibody to HIV on blood testing are considered to be actively infected and capable of transmitting the virus. Most of these infected persons have no signs or symptoms of infection. Ten percent of patients seen in STD clinics who are diagnosed as having syphilis also are infected with HIV.

#### *In Massachusetts:*

*Among 13-21 year olds presenting to STD Clinics, 2.5% are positive for antibodies to HIV.*

*Among those less than 25 years of age seeking care in STD Clinics, who request voluntary HIV counseling and testing, 7.3% are positive.*

*At state-operated anonymous test sites 3.5% of males ages 13 to 21 were HIV positive.*



### Knowledge and Behavior

Several surveys of AIDS knowledge, attitudes, beliefs and behavior (including condom use) have been done in Massachusetts adolescents over the past five years. Education about AIDS and safe sex has reached teens resulting in increased knowledge and less unprotected sex, but inconsistent behaviors and misinformation regarding ways HIV is transmitted are still very prevalent.

#### *In Massachusetts:*

*Among sexually active teens, 69% never use condoms or use them inconsistently.*

*Less than 25% of sexually active teens with five or more partners per year used condoms with each sexual contact.*

*One half of teens in Boston did not know that HIV could be transmitted by having sex with someone who appeared healthy.*

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### Drugs and Alcohol

Drugs and alcohol are critical risk factors for sexually transmitted diseases among adolescents, as they are at any age. Among teenage crack cocaine users in the San Francisco Bay area, more than half combined sex with crack use, one-third had a history of STD and one quarter exchanged sex for drugs or money. Increases in STD rates among teens have correlated with increased crack use in inner city areas.

#### *In Massachusetts:*

*Sixteen percent of teens reported using condoms less often after drinking.*

*Use of drugs led to a 25% decrease in the likelihood of condom use.*

*Three to four percent of Boston teens and 1-2% of teens statewide report injecting drugs within a year.*

*One half of teens who ever used or experimented with intravenous drugs reported needle sharing.*

The first part of the paper discusses the importance of the study of the history of the United States. It is argued that a knowledge of the past is essential for a full understanding of the present. The author then goes on to discuss the various factors which have shaped the development of the United States, including the influence of the British, the Spanish, and the French. The author also discusses the role of the American people in the development of the country, and the importance of the American Revolution. The paper concludes by discussing the future of the United States, and the role of the American people in shaping that future.

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### Runaways

Teen runaways are at special risk with regard to drug abuse and STD's. In the United States, 100,000 to 200,000 runaways are involved in illegal activities each year, including prostitution. Up to one million teens run away from home each year. At a New York shelter health services department a blinded seroprevalence study of HIV antibody revealed a 6.8% positivity rate among young homeless people.

### Colleges and Universities

Colleges and universities in Massachusetts bring together large numbers of young people from all over the country and the world with a broad range of socioeconomic backgrounds. Recently published reports suggest that there have been no significant changes in sexual behavior on campuses in the past 15 years despite concerns about sexually transmitted diseases, although condom use has increased substantially. Surveys of HIV antibody prevalence at university health clinics reveal an overall positivity of 0.2%.

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